

Notice of Allowability	Application No.	Applicant(s)	
	10/046,076	KITAMURA ET AL.	
	Examiner Stanley J. Pruchnic, Jr.	Art Unit 2859	<i>pw</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS**. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to Prelim and filed 16 Jan 2002 and Amdt filed 21 Nov 2003.

2. The allowed claim(s) is/are 7-12.

3. The drawings filed on 16 January 2002 are accepted by the Examiner.

4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of the:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date _____.

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____.
3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____.	7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment
4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance
	9. <input type="checkbox"/> Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with **Attorney Jeffrey A. Schmidt** on **02 March 2004**.

2. The application has been amended as follows in order to more clearly describe the invention by consistently referring to the combination and the "detecting object" in each of the dependent claims 8-11:

In the Claims:

- a. In Claim 8, Line 1, after "rotation sensor", the word "for" has been deleted and the phrase --in combination with-- has been inserted therefor; and
- b. In Claim 8, Line 3, after "detecting", the word "part" has been deleted and the word --object-- has been inserted therefor; and
- c. In Claim 8, Line 4, after "detecting", the word "part" has been deleted and the word --object-- has been inserted therefor.

- d. In Claim 9, Line 1, after "rotation sensor", the word "for" has been deleted and the phrase --in combination with-- has been inserted therefor; and
- e. In Claim 9, Line 2, after "detecting", the word "part" has been deleted and the word --object-- has been inserted therefor.

- f. In Claim 10, Line 1, after "rotation sensor", the word "for" has been deleted and the phrase --in combination with-- has been inserted therefor; and

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- g. In Claim 10, Line 2, after "detecting", the word "part" has been deleted and the word --object-- has been inserted therefor.
- h. In Claim 11, Line 1, after "rotation sensor", the word "for" has been deleted and the phrase --in combination with-- has been inserted therefor; and
- i. In Claim 11, Line 3, the first word "part", before "is a depression", has been deleted and the word --object-- has been inserted therefor.

This application is in condition for allowance except for the presence of the claims 1-6 and 13-16 non-elected without traverse. Accordingly, Claims 1-6 and 13-16 have been cancelled.

Reasons for Allowance

- 3. The following is an examiner's statement of reasons for allowance:

The newly cited references, U.S. Patent No. 5858142 A (Tully, Lowell R. et al., "Angular orientation control system for friction welding") and U.S. Patent No. 4468265 A (MacLaughlin, Donald et al., "Live tool inspection system for spinwelding machinery") relate to friction welding, wherein two items to be joined are rotated (*i.e.*, for "spinwelding") relative to each other then urged together in order to join and form a bond by the frictional heating. Thus rates of rotation of the spindle(s) and joined product are critical in friction welding. Yet, there is no suggestion or motivation in the cited prior art for the combination of a rotation sensor with an ultrasonic welding apparatus, since the prior art does not teach or suggest any criticality to rotating the items to be joined as is required by friction welding methods.

None of the prior art of record teach or fairly suggest the combination of a rotation sensor with an ultrasonic welding apparatus including a cradle and an ultrasonic horn cooperating to hold a rotor during a welding operation as claimed by Applicant in Claim 7, or a method of detecting the rotation of a rotor including rotating a rotor in a cradle after the rotor has been released from engagement between the cradle and an

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ultrasonic horn as claimed by Applicant in Claim 12, as defined in the claims, in combination with the other limitations, each arranged and functioning as recited in claims 7 and 12. Claims 8-11 are allowable by virtue of their dependency upon claim 7.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stanley J. Pruchnic, Jr., whose telephone number is (571) 272-2248. The examiner can normally be reached on weekdays (Monday through Friday) from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. F. Gutierrez can be reached at (571) 272-2245.

The ***Official FAX*** number for Technology Center 2800 is (703) 872-9306 for **all official communications**.

Any inquiry of a general nature or relating to the status of this application or proceeding may be directed to the official USPTO website at <http://www.uspto.gov> or you may call the **USPTO Call Center at 800-786-9199** or 703-308-4357. The Technology Center 2800 Customer Service FAX phone number is (703) 872-9317.



DIEGO F. F. GUTIERREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Stanley J. Pruchnic, Jr.
02 March 2004